

**DRAFT PROGRAMME
1st DAY 17 APRIL 2019, WEDNESDAY**

Damat İbrahim Paşa Hall (A)

08:30 - 09:30

(REGISTRATION)

09:30 - 10:30

(OPENING SPEECHES)

10:45 - 11:15

Prof. Dr. Josef MICHL (University of Colorado)

Advances in the Chemistry of the CB₁₁ Cluster

11:20 - 11:50

Prof. Dr. Marek BRYJAK (Wroclaw University)

Innovative Materials and Processes for Removal of Boron from Aqueous Solutions

11:55 - 12:25

Prof. Dr. Sadık DOST (University of Victoria)

An Overview of Bulk Single Crystal Growth: Experimental and Modelling

12:30 - 13:00

Prof. Dr. İbrahim A. SARAÇOĞLU (Senior Advisor to the President of the Republic of Turkey)

Areas of Usage of Boron in Different Industry and It's Add-value Products

12:30 - 14:00 LUNCH

20:00

GALA DINNER

1st DAY 17 APRIL 2019, WEDNESDAY

Damat İbrahim Paşa Hall (A) ORGANOBORON AND BORON POLYMERS

14:00 - 14:30

Prof. Dr. Xuenian CHEN (Henan Normal University)
The Nucleophilicity of the B-H Bonding
Pair Electrons Inducing New Reactions

14:35 - 14:50

S. DOĞAN, A. AKDAĞ
Synthesis Of Carborane Derivatives
For Characterization Of Carbocations

14:55 - 15:10

S. ÖZTÜRK, S. SÜRDEM
Synthesis and Characterization of
Metaboric Acid Based Polyurethanes

15:15 - 15:30

A. KARA, Ş. ÖZEL, A. OLGUN
Methylene Blue Adsorption on Boron Added
Crosslinked Composites

15:30 - 15:45

COFFEE BREAK
METALLURGY AND MATERIALS

15:45 - 16:15

Prof. Dr. Takao MORI
(University of Tsukuba) Thermoelectric and
Magnetic Properties of Borides

16:20 - 16:50

Prof. Dr. Onuralp YÜCEL
İstanbul Technical University
Synthesis of Boron-Based Compounds and Alloys

16:55 - 17:10

M. BARİŞ
Synthesis of Metal Boride Nanoparticle Via
Mechanochemical Method

17:15 - 17:30

H. SÖZERİ, F. GENÇ
Microwave Absorption Properties of
Mn-Cu Substituted Ni_{0.5}Zn_{0.5}Fe₂O₄

17:35 - 17:50

M. ÖZGÜL, S. ABBAK, M. C. YALÇIN
Effect of Boron Doping on Ferroelectric Properties
in BNT-BT Lead-Free Piezoelectric Ceramics

17:55 - 18:10

U. AYDEMİR, S. Md. K. NAZRUL ISLAM, M. LI, et al
Giant Enhancement of the Figure-of-merit Over a Broad
Temperature Range in Nano-boron Incorporated Cu₂Se

18:15 - 18:30

M.W. ERWEI, I.J. GELDENHUYSEN, M.B. SITEFANE, et al
Fluxing of South African Chromite
Ore with Colemanite

Karavezir Hall (B) BORON MARKET, ECONOMICS AND POLICY

14:00 - 14:30

Serkan KELEŞER
General Manager of ETİMADEN
New Vision in Boron and Strategical Approaches

14:35 - 15:05

Assoc. Prof. Dr. Abdulkerim YÖRÜKOĞLU
Chairman of BOREN
World Trends About Boron
Related R&D Studies

15:10 - 15:40

Hakan KANLI
ETİMİNE SA.
Borates with Respect to European
Chemicals Policy

15:45 - 16:00

M. TOPALOĞLU
Türk Maden Kanununda
Bor Madeninin Yeri

15:00 - 16:15

COFFEE BREAK

16:15 - 16:30

E. İNGER
Use of Boron in Electromagnetic
Launching Theory with Mass Drivers in
Moon Transportation

16:35 - 16:50

M. GÖNEN
Techno-Economic Analysis of Zinc Borate
(2ZnO·3B₂O₅·3H₂O) Production using
SuperPro Designer Program

16:55 - 17:10

C. MERMER, H. ŞENGÜL
Dynamic Assessment Of Criticality
Of Boron Mineral

Mustafa Hayri Efendi Hall (C) BORON AND HEALTH APPLICATIONS

14:00 - 14:30

Prof. Dr. Yalçın DUYDU (Ankara University)
Does Boron Exposure Pose a Risk to Human Health at
Occupational and / or Environmental Exposure Levels?

14:35 - 14:50

S. SUGEÇTİ, E. BÜYÜKGÜZEL, K. BÜYÜKGÜZEL
Usage of Boron and Boron Derivatives in Health,
Ecology and Bioengineering

14:55 - 15:10

F. ZEMHERİ-NAVRUZ, D. ARSLAN-ACARÖZ, S. İNCE
Determination of the Protective Effect
of Boric Acid on Reproductive Performance and
DNA Damage of Drosophila Melanogaster
Exposed to Diazinon

15:15 - 15:30

M. OZANSOY, C. S. PARLATAN, B. Ç. OZANSOY, et al.
Investigation of The Effects of
Two Boron Containing Compounds on Neuronal
Survival in Vitro Axotomy Model

15:30 - 15:45

COFFEE BREAK

15:45 - 16:00

P. N. TAŞLI, A. DOĞAN, S. DEMİRCİ, et al.
Inductive Effect of Boron on Mesenchymal
Stem Cell Differentiation

16:05 - 16:20

I. ÖZKAN, M. YILDIRIM, P. KOÇAK, et al.
Multifaceted Effects of Sodium Pentaborate
on Most Occuring Cancer Types

16:25 - 16:40

R. KÜÇÜKDÖĞRU, Ö. ÖZDEMİR TOZLU, M.E. ARSLAN, et al.
Anticancer Potential of Boric Acid
Against to Prostate Cancer Cell Line

16:45 - 17:00

E. CEBEKİ, N. SESLİ, F. ŞAHİN
Mechanism of Boron Derivatives For
Killing the Lung Cancer Cell Lines

17:05 - 17:20

T. B. HAYAL
Use of Mutant P53 Gene Targeted Lead Borate
Nanoparticles in Cancer Treatment and
Production Method of These Nanoparticles

17:25 - 17:40

B. E. TEPEDELEN
Investigation of Anti-carcinogenic Effect of New
Synthesis Boron Compound in Prostate,
Cancer Cells Through Inhibition of
FAK/ERK/NF-κB Signaling Pathway

Gülşehir Hall (D) BORON IN GLASS, FIBER AND COMPOSITE MATERIALS

14:00 - 14:30

Assoc. Prof. Dr. Masahito Ueda (Nihon University)
3D Printing of Continuous Fiber
Composites - Prospect for Boron Composites -

14:35 - 15:05

Prof. Dr. Şener OKTİK (Şişecam)
Glass Science & Technology:
Boron in Glass and Glass Fibers

15:10 - 15:25

YU. G. PAULIUKEVICH, L. F. PAPKO,
E. E. TRUSOVA, et al.
Comprehensive Comparative Assessment of,
Technological, Physical, Chemical and
Environmental Properties of Glass for the
Production of E-glass Fiber with Boron and Without Boron

15:30 - 15:45

YU. G. PAULIUKEVICH, L. F. PAPKO,
A. P. KRAUCHUK, et al.
Influence of Boron-containing Components on
Processing of Basalt Melts and Glasses

15:50 - 16:05

T. KAVAS, R. KURTULUŞ
Production of Foam Glass by
Waste Glass And Boron Mineral

16:05 - 16:20

COFFEE BREAK

16:20 - 16:35

K. GÜRCAN, E. AYAS
Efficient Technology for the Fabrication of
Ultra High Temperature Borides and Composites

16:40 - 16:55

M. BALCI, H. ÇELEBİ
Preparation and Characterization of Boron Nitride
Nanosheets (BNNS) Reinforced Poly(lactic acid) Composites

17:00 - 17:15

M. ÇÖL, R. YAMANOĞLU, A. AKBAŞ, et al.
Characterisation and Production Method of
Magnesium Metal Matrix Composite Materials
Reinforced with B4C Particles

17:20 - 17:35

N. F. YILMAZ, M. F. KALKAN
Effects of Process Parameters of
Casted Aluminium/Boron Carbide Composites

17:40 - 17:55

D. DOĞAN, A. Ü. METİN
Synthesis and Characterization of Boron
Nitride Containing Biocomposite Films

18:00 - 18:15

A. YAVUZ
Corrosion Behaviour of Borax Reinforced
Aluminium Matrix Composites

Avanoslu Selahattin Hall (E) GEOLOGY, MINING, MINERAL PROCESSING

14:00 - 14:30

Prof. Dr. Abidin TEMEL (Hacettepe University)
Geology, Mineralogy and
Origin of Turkish Borate Deposits

14:35 - 15:05

Prof.Dr. Şafak Gökhən ÖZKAN
(İstanbul University) Recent Advances on
Mining and Mineral Processing of Raw Borates

15:10 - 15:25

H. TÜZÜN, S. ÜN, Ş. BUĞDAYCI
Concentrated and Refined
Boron Products

15:30 - 15:45

A. DEMİR, E.B KAYA, K. TURAN, et al.
Analysis of Boron Compounds
with LIBS Technology

15:45 - 16:00

COFFEE BREAK

16:00 - 16:15

M. Ş. SÖNMEZ
Overview of Lithium Recovery
From Boron Ores and Tailings

16:20 - 16:35

A. ATAŞ, İ. C. ENGİN
The Effect of Different Modelling Techniques
in Determining the Reserve of a Boron Site

16:40 - 16:55

G. EKİNCİOĞLU, R ALTINDAĞ
Investigation of Noise Values Changes of
Boron Carbide Doped Circular Saws
in Granite Cutting

17:00 - 17:15

F. KAYA, A.ÖZER
Kitosan ve Kitosan Bazlı Sorbentler ile Borik
Asit Çözeltisinden Sulfat Adsorbsiyonu

DRAFT PROGRAMME

2nd DAY 18 APRIL 2019, THURSDAY

Damat İbrahim Paşa Hall (A)

METALLURGY AND MATERIALS

09:00 - 09:30

Prof. Dr. Barbara ALBERT (University of Darmstadt)
Solid State Chemistry of Metal Borides - Versatile Materials
for Thermoelectrics, Catalysis, and Further Applications

09:35 - 09:50

Ö. BALCI, U. BURKHARDTC,
M. SCHMIDTC, et al.

Microstructural Evolution and Properties
of In-house Processed TiB₂ Ceramics

09:55 - 10:10

H. BOUSSEBHA, S. BAKAN, A. O. KURT
Synthesis of B4C Powder Via Dynamic
Thermochemical Method

10:15 - 10:30

S. MERTDİNÇ, Y. YÜREKTÜRK, D. AĞAOĞULLARI
Mechanical Alloying and Sintering of Laboratory
Synthesized Fe2B Reinforced Al-7Si Composites

10:30 - 10:45

COFFEE BREAK

10:45 - 11:00

İ. B. ALGAN, M. N. ARIK, Ş. TALAŞ
Effect of Boron on Microstructure and
Hardness Properties of High Entropy Alloys

11:05 - 11:20

Z. YEĞİNGİL, A. ÖZDEMİR, V. ALTUNAL,
Development of Lithium Tetraborate (Li₂B₄O₇-Ag-Eu)
Compound Doped with Silver (Ag) and Europium
(Eu) as a Luminescence Dosimeter Using TL-OSL Technique

11:25 - 11:40

"A. MIKELADZE, O. TSAGAREISHVILI,
L. CHKHARTISHVILI
Obtaining of Some Boron-Containing and Related
Nanocrystalline Systems from Solutions and Suspensions

11:45 - 12:00

S. AKPINAR, M. YILDIZ, S. ABBAK
Surface Modification of Anhydrous Borax
with Various Silanes in Ethyl Acetate

12:05 - 12:20

S. AKPINAR, M. BÜYÜKÇERÇİ, S. ABBAK
Surface Modification of Anhydrous Borax
with Various Silanes in Toluene

12:25 - 12:40

B. DEMİREL, E. ŞENYİĞİT, A. C. ÖZTÜRK, et al.
Investigation of Ballistic Behaviours of Kevlar and
Boron Fiber on Helmet Design by Ansys

Karavezir Hall (B)

GEOLOGY, MINING, MINERAL PROCESSING

09:00 - 09:30

Prof. Dr. Cahit HELVACI (Dokuz Eylül University)
An Overview of the Origin and Distribution of Evaporitic
Borate: the Primary Economic Source of Boron

09:35 - 09:50

E. YOĞURTÇUOĞLU, O. DALGALI
Evaluation of Bigadiç Colemanite and
Ulexite Slurry Wastes by Heap Leach

09:55 - 10:10

H. M. ŞİMŞEK, R. GULİYEV,
A. V. BEŞE
Optimisation of Dissolution of
Borogypsum in (NH₄)₂HPO₄ Solution

10:10 - 10:25

COFFEE BREAK

BORON COATING TECHNOLOGIES

10:25 - 10:55

Prof. Dr. Bilgin KAFTANOĞLU (Atılım University)
Performance of Boron Nitride (BN) Coatings on
Tools and Dies in Manufacturing

11:00 - 11:30

Prof. Dr. Efstrathios MELETIS
(University of Texas at Arlington)
B-containing Coatings for Applications
in Harsh Environments

11:35 - 11:50

Y. GÜRCAN, A. İŞITAN
The Wear Behavior Analysis of Boronized
of Industrial Cutting Die Punches Made
from AISI D2 Cold Work Steel

11:55 - 12:10

İ. EFEOĞLU, A. KELEŞ, Y. TOTİK
Influence Target Voltage on The Mechanical and
Tribological Properties of c-BN Films Coated with HIPIMS

12:15 - 12:30

T. CENGİZ, B. TANİŞ, Ş. M. GÜLEN
Abrasion Resistance of Vitreous Enamel
Coatings with Addition of Boron Carbide (B₄C) Particles

12:35 - 12:50

S. PAT, Ş. KORKMAZ
TiB₂ Nano Layer Coatings Prepared by
Thermionic Vacuum Arc Deposition System

Mustafa Hayri Efendi Hall (C)

BORON AND HEALTH APPLICATIONS

09:00 - 09:30

Prof. Dr. Mehmet KORKMAZ
(Manisa Celal Bayar University)
Effects of Dietary Boron on Semen Profile

09:35 - 09:50

F. EKİNCİ, M. H. BÖLKÜDEMİR
Hadronterapide Bor ve Karbon Demetiñin Su
Fantomundaki Enerji Dağılımlarının Karşılaştırılması

09:55 - 10:10

R. KURU, S. YILMAZ, G. BALAN
Boron Levels in Main Body Fluids: Can Saliva
Boron Levels Replace Serum Boron Levels?

10:15 - 10:30

O. İCTEN, B. KARAN
Magnetic Nanocomposites
of Boron for Biomedical Applications

10:30 - 10:45

COFFEE BREAK

10:45 - 11:00

Ö. E. AKDERE, A. S. KİREMİTCİ,
M. GÜMÜŞDERELİOĞLU
Boron Doped Biocomposites in
Bone Tissue Engineering

11:05 - 11:20

A. E. PAZARÇEVİREN, D. KESKİN, A. TEZCANER
Osseointegrasyon Destekleyici Bor ile
Katkılardırılmış Hidroksipatit/Trikalsiyum
Fosfat Üretimi

11:25 - 11:40

D. ATILA, R. M. RAD, Z. EVİS
Bilayered Membranes Containing Boron-Modified
Bioactive Glass Nanoparticles For Guided Bone Regeneration

11:45 - 12:00

B. ÇUKURLUOZ BAYINDIR, İ. BAĞ
Evaluation of the Effect of Boric Acid Addition on
the Water Absorption of Glass Ionomer Cements

12:05 - 12:20

Y. UZUN, H. KOVACI, A. F. YETİM
Effect of Boriding on Cytotoxicity of CoCrW
Dental Alloy Produced by Selective Laser Melting

12:25 - 12:40

T. SEÇKİN
Preparation and Investigation of Adhesive Properties
of Biomimetic Boronic Acid Copolymers

Gülşehrî Hall (D)

BORON IN AGRICULTURAL APPLICATIONS

09:00 - 09:30

Prof. Dr. İsmail ÇAKMAK
(Sabancı University)
The Role of Boron Nutrition in Plant Growth

09:35 - 09:50

C. J. ZAPF
Borates in between Science and Practice in Plant Nutrition

09:55 - 10:10

CHUDE. V. O., NAFIU A.K.
Importance of Boron Micronutrient in
Agriculture in Africa and its Impact on Health

10:15 - 10:30

T. LEHTO
Effects of Boron Deficiency in Forest Trees

10:30 - 10:45

COFFEE BREAK

10:45 - 11:00

S. GEZİN, F. G. YILMAZ, N. DURSUN
Boron Fertilizer Application in Plant Growth

11:05 - 11:20

L. SHI, H. SHI, X. MA, et al.
Effect of Etibor-48 and Colemanite on Seed Yield
and Seed Quality of Oilseed Rape (*Brassica napus*)
and their Residual Effectiveness for Rotated Rice

11:25 - 11:40

M. SALEEM, A. W GANDAHİ, S. M. BHATTI
Direct and Residual Effects of Boron and Zinc on
Growth and Nutrition Status of Rice and
Subsequent Wheat Crop

11:45 - 12:00

A. DELİBORAN, K. SAVRAN, Ö. DURSUN, et al.
Determination of Nutritional Status in Terms of
Boron and the Other Elements of Olives
(*Olea europaea* L.) Grown in Izmir Province

12:05 - 12:20

M. HAMURCU, E. E. HAKKI, Y. İŞIK, et al.
Effects of Different Boron Applications
on Wheat Yield

12:25 - 12:40

M. İŞIK, M. B. TORU
Determination of Boron Doses on Potato Plant
Growth and It's Concentration in Shoot Under
Green House Conditions

Avanoslu Selahattin Hall (E)

BORON IN IMPREGNATED CHEMICALS AND CONSTRUCTION MATERIALS

09:00 - 09:30

Prof. Dr. S. Nami KARTAL
(İstanbul University)
Wood and Boron : A Natural Harmony

09:35 - 09:50

S. N. KARTAL, E. TERZİ, A. F. KANTÜRK, et al.
Preliminary Evaluation of Boron Movement
from Ulexite and Colemanite-containing
Rods in Wood

09:55 - 10:10

A. K. CHATTOPADHYAY
Wood Protection and Efficacy of a Novel
Boron-based Surfactant

10:15 - 10:30

S. YILDIZ, C. ESEROĞLU, S. SÜRDEM, et al.
The Investigation of Boron and Copper Leaching
from Vacuum Pressure Treated Yellow Pine

10:30 - 11:45

COFFEE BREAK

11:45 - 12:15

Prof. Dr. Alpagut KARA
(Eskişehir Technical University)
Role of Boron Compounds in
Sustainable Production of Ceramic Tiles

11:20 - 11:35

Z. KARAAĞAÇ, G. DURNA, A. KARA, et al.
Development of Suitable for Rapid Sintering Glaze Composition
which has Technological Properties of the Hard Porcelain Glaze

12:40 - 12:55

A. SAGLIK, T. BATMAZ
The Characteristics of Boron Modified
Active Belite (BAB) Cement

12:30 - 14:00 LUNCH

2nd DAY 18 APRIL 2019, THURSDAY

Damat İbrahim Paşa Hall (A)

METALLURGY AND MATERIALS

14:00 - 14:30

Prof. Dr. Nuran AY (Eskişehir Technical University)
Boron Nitride: Production and Recent Progress in New Applications

14:35 - 15:05

Cem SAPMAZ (General Manager of Nurol Technology)
Uses of Boron Carbide Ceramics in Defence Industry and Future Opportunities on It

15:10 - 15:25

N. KOÇ

Investigation of Solid State Synthesis Parameters of Strontium Hexaboride Powders using SrCO₃ and NaBH₄

15:30 - 15:45

S. KHOSHİMA, Z. ALTINTAŞ, M. SOMER
CoB-TiB₂ Composite Boride Powders: Single Step Synthesis and Characterization

15:45 - 16:00

COFFEE BREAK

16:00 - 16:15

S. AVCIOĞLU, F. KAYA, C. KAYA
Optimization of Sol-Gel Synthesized Preceramic Polymer Precursors for Fabrication of High Purity Boron Carbide (B₄C) Powders

16:20 - 16:35

Z. YILDIZLI, M. ÖZÇİFTÇİ, A. O. KURT
Synthesis of TiB₂ Powders via Dynamic / Carbothermal Reduction Method

16:40 - 16:55

B. YEDEKİ, A. TEZCANER, B. YILMAZ, et al.
Synthesis and Microstructural Analysis of Boron and Strontium ions Co-Doped Hydroxyapatite

17:00 - 17:15

A. Ü. METİN, B. CANÖZ, M. GÜRÜ
Synthesis and Characterization of Magnesium Diboride (MgB₂) as Energetic Compound

17:20 - 17:35

M. BUĞDAYCI, A. TURAN, O. YÜCEL
Synthesis and Sintering of TiB₂

17:40 - 17:55

Y. KARACA, C. CARBOĞA, B. KURT
The Effect of Boron Addition on Microstructure and Mechanical Properties of High Entropic CrMnFeCoNiAl Alloy

Karavezir Hall (B)

BORON COATING TECHNOLOGIES

14:00 - 14:30

Prof. Dr. Hatem AKBULUT (Sakarya University)
Application and Future of Electroless and Electrodeposited dNi-B Coatings

14:35 - 14:50

Y. YILMAZ, M. UYSAL, H. AKBULUT
Effect of Heat Treatment on Microstructure and Hardness of Electroless Ni-B Coatings

14:55 - 15:10

C. ESEROĞLU, S. YILDIZ, S. SÜRDEM
Investigation of the Effect of Reductant Concentration on Microstructure and Corrosion Properties of Ni-B Coatings

15:15 - 15:30

S. BUDAK, S. APAY
B4C Coating of AISI 304 Stainless Steel Rod with Different Current Types

15:30 - 15:45

COFFEE BREAK

15:45 - 16:00

T. TEKER, M. SARI, E. M. KARAKURT
Coating of Carburizing Steel with Pack Boronizing Method

16:05 - 16:20

Ş. OCAK ARAZ, S. U. BAYCA, O. BİCAN, et al.
Effect of Solid-Boronizing Process on Wear and Corrosion Properties of the AISI304L Steel

16:25 - 16:40

G. KARTAL ŞİRELİ, O. K. COŞKUN, S. İ. TİMUR
CRTD-Bor of AISI 4340 Steel for Improved Mechanical Properties

16:45 - 17:00

O. ÇİMEN, H. ALBOĞA, B. ÇİÇEK
Development of B2O3 Doped Sol-Gel Ceramic Coatings with Improved Tribological and Mechanical Properties

17:05 - 17:20

S. URDEM, E. DURU, H. ALGUL, et al.
Wear Behavior of Electroless Ni-B-Al2O3 Nanocomposite Coating

Mustafa Hayri Efendi Hall (C)

BORON AND HEALTH APPLICATIONS

14:00 - 14:15

A. UGUR, R. BORAN, T. BAYGAR
In Vitro Evaluation of the Antibiofilm and Anti-quorum Sensing Potential of Boric Acid and Its Cytotoxicity

14:20 - 14:35

S. S. HAKKI
Boron Containing Mouthwash

14:40 - 14:55

N. SARAC, T. BAYGAR, A. UGUR
Determining the Antimicrobial Activity and Wound Healing Capacity of Disodium Octaborate Tetrahydrate

15:00 - 15:15

T. ÖZDEMİR ÖGE, A. Ü. KESKİNER, F. B. ÖZDEMİR
Investigation of Antifungal Activity of Borax-Glycerin against Candida Albicans

15:20 - 15:35

A. DOĞAN, S. DEMİRCİ, H. BİJANPOUR
The wound healing activity of Sodium pentaborate pentahydrate (NaB) containing hydrogel

15:35 - 15:50

COFFEE BREAK

15:50 - 16:05

O. K. KIRBAŞ, B. T. BOZKURT, İ. ÖZKAN
Enhancing Effects of Erbium-Borate Nanoparticles on Wound Healing

16:10 - 16:25

O. CEYLAN, N. SARAC, A. UGUR
Assessment of the Anti-quorum Sensing Activity and Cytotoxicity of Potassium Metaborate

16:30 - 16:45

E. AVŞAR ABDİK, H. ABDİK, P. N. TAŞLİ
The Effects of Boron on Adipogenesis and Fat Deposition in Human Adipose-Derived Stem Cells

16:50 - 17:05

H. ABDİK, A. DOĞAN, S. DEMİRCİ
Boron-containing Compounds as Potential Anti-obesity Agents

Gülşehrî Hall (D)

BORON IN AGRICULTURAL APPLICATIONS

14:00 - 14:15

O. ÖZKÖK
Boron Usage in Agriculture and Future Projection

14:20 - 14:35

O. ERSAN, H. K. KARATAŞ
An Industrial 2mm to 4mm sized Boron Granules Production Method from Micronized Boron Products

14:40 - 14:55

R. GULİYEV, H. MUMCU ŞİMŞEK
Investigation of the Physical Properties of Composite Fertilizer Produced by Solving Borojips in Diammonium Phosphate Solutions

15:00 - 15:15

I. HAYATI
The Removal of Boron Emissions from Glass Furnace Flue Gases, Resulting in the Production of an Agricultural Boron Fertilizer

15:20 - 15:35

F. GÜKMEN YILMAZ, N. DURSUN, T. DEĞER, et al.
Effects of Different Boron Applications on Yield, Quality and Leaves Boron Content of Sugar Beet

15:35 - 15:50

COFFEE BREAK

15:50 - 16:05

E. HAKKI, A. PANDEY, M. K. KHAN, et al.
Marker Assisted Selection based Development of Boron and Salt Stress Tolerant Bread Wheat Material

16:10 - 16:25

A. PANDEY, M. K. KHAN, E. E. HAKKI
Molecular Insight into Boron Hyperaccumulation of *Puccinellia distans*

16:30 - 16:45

H. ŞELALE, S. E. ÖZTÜRK, M. GÖKTAY, et al.
Investigation of Boron Tolerance Mechanisms in Boron Hyperaccumulator *Puccinellia distans*

16:50 - 17:05

M. G. YAZGAN, F. GÜKMEN YILMAZ, N. DURSUN
Effects of Different Boron Applications on Micronutrients Content of Sugar Beet Leaves

17:10 - 17:25

H. BULUT, H. KENDİR
The Effect of Boron Fertilization on Herbage Yield of Berseem (*Trifolium alexandrinum* L.) Varieties

17:30 - 17:45

S. DEMİR BİYIKLİ, M. A. TURAN
Boron Mobility in Plum Trees (*Prunus domestica* L.)

17:50 - 18:05

M. K. KHAN, K. GULCAN, P. ARACENA SANTOS, et al.
Boron Uptake in Commercial Turkish Strawberry Genotypes

18:10 - 18:25

M. HARMANKAYA, Y. ISIK, F. GÜKMEN YILMAZ, et al.
Effects of Boron Applications on Yield of Sugar Beet

Avanoslu Selahattin Hall (E)

BORON IN IMPREGNATED CHEMICALS AND CONSTRUCTION MATERIALS

14:00 - 14:15

Q. WANG, Q. ZHANG, J. GAO, et al.
The Effect of the Colemanite on the Melting Properties of Rock Wool

14:20 - 14:35

Y. AYGÖRMEZ
Metakaolin-Based Geopolymer Composites with Boron Waste Colemanite Additive

14:40 - 14:55

A. G. ÇELİK, S. SÜRDEM, R. KIZILTAS, et al.
Boron Added Bims Brick Production

15:00 - 15:15

A.G. ÇELİK, T. UYGUNOĞLU, İ. GÜNEŞ, et al.
Production and Characterization of Boron Doped Perlite Brick

15:15 - 15:30

COFFEE BREAK

15:30 - 15:45

B. ÖZTÜRK, S. Ö. VARIŞLİ
Improving the Properties of Roof Tiles with High Boroxide Glaze

15:50 - 16:05

T. UYGUNOĞLU, A. G. ÇELİK, İ. GÜNEŞ
Effect of Boriding Duration on Corrosion of Reinforcing Rebar

16:10 - 16:25

H. TANYILDIZI, M. BULUT, Z. ARTUN
Investigation of Mechanical Properties of Mortars Containing Colemanite

16:30 - 16:45

H. TANYILDIZI, Z. ARTUN, M. BULUT
Investigation of Compressive Strength and Ultrasonic Pulse Velocity of Concrete Containing Colemanite

DRAFT PROGRAMME

3rd DAY 19 APRIL 2019, FRIDAY

Damat İbrahim Paşa Hall (A)

BORON CHEMICALS

09:00 - 09:30

Prof. Dr. M. Suat SOMER (Koç University)
Processing and Applications of Amorphous Elemental Boron

09:35 - 10:05

Prof. Dr. Zafer EVİS
(Middle East Technical University)
Production of Boron Carbide and Its Sustainable Usage in Industry

10:10 - 10:25

S. İFLAZOĞLU, A. YILMAZ, E. BULUR
Synthesis of Barium and Magnesium Tetraborate Compounds, Investigation of Optical and Dosimetric Properties

10:30 - 10:45

M. E. KİBAR, M. YILDIZ
Synthesis of Boron Doped Titania and Lactic Acid Production

10:45 - 11:00

COFFEE BREAK

11:00 - 11:15

G. ELMACI, B. KARAN
Mineral-Controlled Isotopic Fractionation of Boron

11:20 - 11:35

A. ALTAN, E. AKINCI, M. ARCA
Preparation of Aqueous Solution of Boric Acid/Borax and Comparing Its Performance to Powder Boric Acid/Borax in Starch Adhesive

11:40 - 11:55

Z. İNAN, G. EMNİYET, A. YALÇIN, et al.
Production and Characterization of Zinc Borate ($4ZnO \cdot B_2O_3 \cdot H_2O$) Using a Single Step Hydrothermal Method

Karavezir Hall (B)

RECOVERY OF BORON AND ENVIRONMENT

09:00 - 09:30

Prof. Dr. Cemre ZANBAK
(Turkish Chemical Manufacturers Association)
Safety And Security Concepts In Chemicals Management And Regulatory Aspects of Boron Minerals/Chemicals

09:35 - 09:50

A.Y. GÖREN , H.E. ÖKTEN
Boron Removal and Energy Production from Aqueous Solution using Microbial Desalination Cell

09:55 - 10:10

A. OLGUN, A. KARA, P. SEVİNÇ
Adsorption of Hexavalent Chromium from an Aqueous Phase by Chemically Modified Composite Material Containing Boron

10:15 - 10:30

Z. KARACOBAN, H. ALTUNDAG
Investigation of Seasonal Boron Concentration in Sapanca Lake, Sakarya Province

10:30 - 10:45

COFFEE BREAK

10:45 - 11:00

S. GÜCLÜ, B. ZEYTUNCU, B. ERYILDIZ,...
Boron Removal from High Boron Containing Water Sources by Membrane Technologies

11:05 - 11:20

T. A. YEŞİL , H. BALOĞLU , E. ERTÜRK
Ligand Synthesis for Removal of Boron from Wastewater

11:25 - 11:40

T. AKKAŞ BOYNUEĞRİ, M. YILDIRAN SERİN, S. DURSUN
Producibility of Ammonium Sulfate by Using Waste Gypsum

11:45 - 12:00

M. CEYLAN, M. İlker ÜNLÜ, S.YILMAZ
Utilization of Pollutable Condense which is Originated from Operations of Kirka Boron Plant as Boiler Feedwater by Means of Purification

12:05 - 12:20

A. E. OSMANLIÖĞLU, Ş. G. ÖZKAN
Boron in Nuclear Waste Management

Mustafa Hayri Efendi Hall (C)

BORON DYES AND NONFLAMMABLE MATERIALS

09:00 - 09:30

Selçuk BERKEM (Consultancy)
Industrial Works and Possible Projects for Textile Fabric Production by Using Boron Compounds

09:35 - 09:50

F. TUNALI, C. YILMAZ, Z. KAYA, C. BASRIK
The Use of Zinc Borat in Home Textile Products as a Flame Retardant

09:55 - 10:10

G. GÜNGÖR, D. Y. AYDIN, M. GÜRÜ
Synthesis of Calcium Fluoroborate from Calcium Oxide and Usability as Flame Retardant

10:15 - 10:30

I. CANPOLAT, S. YAVUZ, A. S. İŞIK
Comparision of Zinc Borate and Antimony Trioxide Flame Retardant Efficiency on Modacrylic Fiber

10:30 - 10:45

COFFEE BREAK

10:45 - 11:00

H. KURT, M. GÜRÜ, D. YILMAZ AYDIN, et al.
Synthesis of Lead Fluoroborate and Usability as Flame Retardant

11:05 - 11:20

M. SARI
Investigation on Effect of Zinc Borate and Carbon Nanotube Reinforcement on Fire Retardant and Mechanical Properties in Epoxy Based Liquid Paint

11:25 - 11:40

G. ÖZKARADEMİR, M. ERKOÇ, D. SARAPNAL
Application of Reducing Agent Based on Boron by Padding Method in Indigo Dyeing Process

Gülşehir Hall (D)

BORON AND ENERGY

09:00 - 09:30

Prof. Dr. Ali GENÇER
(Ankara University)
 MgB_2 : Potentials for Industrial Applications

09:35 - 09:50

M. N. KÜTÜKÇÜ
Infinitely Long Superconductive MgB_2 Wire Production Technology, Specifications and Applications

09:55 - 10:10

A. E. OSMANLIÖĞLU, Ş. G. ÖZKAN
Shielding Properties of Boron in Nuclear Energy

10:15 - 10:30

B. BÜYÜK, A. B. TUĞRUL, N. AY
Neutron Attenuation Properties of Hexagonal Boron Nitride Material Against Pu-Be Neutron Source

10:30 - 10:45

COFFEE BREAK

10:45 - 11:00

H. AYDIN, D. DURSUN, Ü. KURTAN, et al.
Enhanced Performance of Supercapacitor Based on Crosslinked Borane/Poly(ethylene glycol) Gel Polymer Electrolyte System

11:05 - 11:20

K. KIRAZ, S. AFYON, S. ACAR, et al.
Synthesis, Manufacturing and Applications of Energetic Al-Mg-B Alloys as Solid Rocket Fuel Enhancers

11:25 - 11:40

S. T. GÜVENÇ, M. ŞAHİN
Evaluation of Some Technical Datas on Boron containing Fuel Which is Developed for Internal Combustion Engines

11:45 - 12:00

M. E. KİBAR, A. N. AKIN
Investigation of Carbonation Reaction by Experimental Design

11:45 - 12:00

G. BİLGİÇ, F. ARLI, M. ŞAHİN
A New Technique for the Industrial Production of Elemental Boron Used in Rocket Fuels

12:30 - 14:00 LUNCH

3rd DAY 19 APRIL 2019, FRIDAY

Damat İbrahim Paşa Hall (A) BORON CHEMICALS

14:00 - 14:30

Prof. Dr. Ömer ŞAHİN (Siirt University)
Crystallization of Boron Compounds and
Problems Encountered During Crystallization

14:35 - 14:50

İ. YAKAR ELBEYLİ, M. BİLEN
Development of the Production Technology for
Boric Acid Containing Low Alkali Sulphate

14:55 - 15:10

D. ÖZKAN, M. A. YILMAZ, E. SULUKAN
Tribological Behavior of The Low-Concentration
Boric Acid and Zddp Lubricating Oil Mixtures

15:15 - 15:30

Z. TANRISEVEN, A. GÜL, M. ÖZAYMAN
Nano Boric Acid as Motor Engine Oil Lubrication
Additive:Suspension, Viscosity and Tribometry Analyses

15:35 - 15:50

M. A. YILMAZ, D. ÖZKAN, E. SULUKAN
The Wear Resistance Increase of Boric Acid
Synthetic Base Oil Mixture by Adding MoS₂

15:50 - 16:05

COFFEE BREAK

16:05 - 16:20

B. BİLGİÇ
Recrystallization of Ammonium Perchlorate
on Amorphous Boron Powder

16:25 - 16:40

Ç. ATEŞ, B. BAYRAKTAR, M. BARİŞ
Statistical Analysis on Parameters that Affect the
Purity of the Elemental Boron Synthesized by the
Mechanochemical Method

16:45 - 17:00

Y. Z. HALEFOĞLU
YAI3B4O12 Fosforun Yanma Yöntemi İle
Sentezi ve Karakterizasyonu

17:05 - 17:20

G. GÖKTAŞ, M. ŞAHİN, S. BİLGİÇ
Industrial Process for Elemental Boron
Production by Electrochemical Method

Karavezir Hall (B) RECOVERY OF BORON AND ENVIRONMENT

14:00 - 14:30

Prof. Dr. Syouhei NISHIHAMA (Osaka University)
Separation of Boron from Water Environment with
Adsorption by Glucamine-Based Chelate Adsorbents

14:30 - 15:05

Prof. Dr. Nalan KABAY (Ege University)
Separation and Recovery of Boron from
Various Water Resources

15:10 - 15:25

F. SEN, E. ALTIOK, P. CYGANOWSKI, et al.
Utilization of Core-shell Type N-methyl-D-glucamine
Functionalized Ion Exchange Resins for Separation of
Boron from Geothermal Water

15:30 - 15:45

E. GÜLER, G. ÖNER, N. KABAY, et al.
Effect of Operational Parameters for Boron
Removal from Geothermal Water
by Reverse Osmosis (RO) Membranes

15:45 - 16:00

COFFEE BREAK

16:00 - 16:15

E. ALTIOK, F. SEN, J. WOLSKA
Removal of Boron from Geothermal Water by Sequential
Reverse Osmosis (RO) and Ion Exchange Processes

16:20 - 16:35

D. İPEKÇİ, S. BUNANI, E. ALTIOK, et al.
Separation of Boron and Lithium from Aqueous
Solution via Bipolar Membrane Electrodialysis
(BMED)-Effect of Sample Solution pH

16:40 - 16:55

K. ASLAN, O. ÇOBAN, F. B. ALP
Alginate Based Composite Adsorbent Usage
for High Concentrated Boric Acid Removal

17:00 - 17:15

A. Ö. ÖZDEMİR, H. GÜRER, D. AKIN ŞAHBAZ, et al.
(Investigation of the Usability of Boron Mining
Waste as a Filler in the Rubber Industry)

17:20 - 17:35

T. ONARGAN, O. AKSOY, K. KÜÇÜK, et al.
Importance of Water Management in Boron Open Pit Mines
and Model of the Controlled Drainage Based Planning

Mustafa Hayri Efendi Hall (C) BORON DYES AND NONFLAMMABLE MATERIALS

14:00 - 14:30

T. ÖZDEMİR ÖGE, A. Ü. KESKİNER, F. B. ÖZDEMİR
Spectroscopic Study and Investigation
of Antifungal Activity of Antiseptic Magistral
Drug against Candida Albicans

14:35 - 14:50

C. SOYLUKAN, F. ALGI
A New Molecular Theranostic
based on a NIR Azobodipy Dye

14:55 - 15:10

N. TÜRKEL SESLİ, S. TAPŞIN, F. ŞAHİN
Mechanism of Boron Derivates for the
Treatment of Renal Cell Carcinoma

15:15 - 15:30

A. DEĞIRMENCİ, Ö. SONKAYA, M. PAMUK ALGI, et al.
Design and Synthesis of
a Chemiluminogenic BODIPY

15:30 - 15:45

COFFEE BREAK

Gülşehirî Hall (D) BORON AND ENERGY

14:00 - 14:30

Prof. Dr. Metin GÜRÜ (Gazi University)
Synthesis of Boron Hydride Compounds as
Hydrogen Carrier and Their Innovative Applications

14:35 - 14:50

F. G. BOYACI SAN, Ç. KARADAĞ, B. ERDÖR TÜRK, et al.
Development of Hydrogen Production
System based on Sodium Borohydride

14:55 - 15:10

M. S. YAZICI, F. G. BOYACI SAN
Production of Boron-doped CVD
Graphene and Fuel Cell Performance

15:15 - 15:30

T. N. KARAMETE, A. ŞAHİN, İ. AR
Synthesis of Speck-Pva Based Composite
Membrane with Boric Acid for Pem Fuel Cells

15:30 - 15:45

COFFEE BREAK

15:45 - 16:00

H. B. MURATHAN, G. ÖZKAN, G. ÖZKAN
Investigation of the Synthesis Conditions of the
Hydrogen Storage Material: n-Butylamine Borane

16:05 - 16:20

D. ÖZER, D. A. KÖSE, N. ALTUNTAŞ ÖZTAŞ
Boron-Containing Metal-Organic Frameworks
for Hydrogen Storage Applications

16:25 - 16:40

Y. SUBAŞI, D. HACIU, M. S. SOMER, et al.
The effect of Lithium Bis(oxalate)borate,
LiB(C₂O₄)₂(LiBOB), on the Cycling Stability
of TiO₂ / Reduced Graphite Oxide Anode Materials

16:45 - 17:00

R. KIZILTAS, G. ÖZKAN, D. ÖNCEL ÖZGÜR, et al.
Synthesis and Characterization of Ammonia
Borane with High Hydrogen Storage Capacity